

SWBAT: relate and give examples of voltage

Jan 4-7:20 AM

SECA Physics
Thursday 20 February 2014

Welcome!!!

H. Leslie Grebe

* Pick up:

- slip of paper (for later)
- yellow sheet

Centering

Test Tuesday!

Opening Questions:

What do you think "electric current" means?

WAY ELECT GOES

RIVER CURRENT

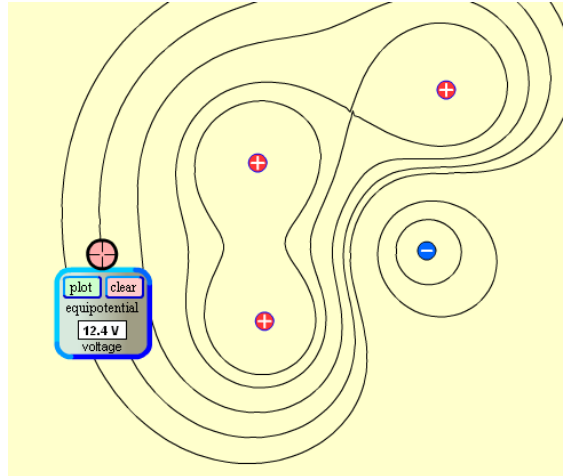
FLOW OF
CHARGES

Sep 7-7:04 AM

Big Idea from yesterday:

Voltage:

is the **potential** based on **position** in an electric field.



Feb 18-6:47 AM

What uses electric current?

In groups, think of as many things as you can that

- are in this room &
- use current (the flow of electrons)

CHAIR
DOOR HANDLES

- | | | | |
|------------------|--------------------|--------------|-------------------|
| - CALCULATOR | - PENCIL SHARPENER | - CLOCK | - BRAIN / MUSCLES |
| - DIABETES METER | - LAND PHONE | - DVD | |
| - SMART BOARD | - OUTLETS | - JACK | |
| - LAPTOP | - LIGHTS/SWITCH | - COMP. CART | |
| - STEREO | - PROJECTOR | - HEADPHONES | |
| - CELL PHONE | - DOOR LOCKS | - FIRE ALARM | |
| - CONTROL PANEL | | - DESK TOP | |
| | | - STOP WATCH | |

Feb 18-6:50 AM

Concept sheet: 6 rows total

An electron is $1.6 \times 10^{-19} \text{ C} = .0000000000000000016 \text{ C}$

Concept	Meaning	Symbol	Units	Analogy
CHARGE	PROPERTY OF PROTONS & ELECTRONS THAT CAUSES ATTRACTION & REPULSION	q	COULOMBS C	
VOLTAGE =ELECTRIC POTENTIAL	POTENTIAL BASED ON POSITION IN AN ELECTRIC FIELD	V	VOLTS V	
CURRENT	THE FLOW OF ELECTRIC CHARGE $= \frac{\text{CHARGE}}{\text{TIME}}$	I $I = \frac{q}{t}$	AMPERE A $1A = 1 \frac{C}{s}$	$\frac{q}{I \cdot t}$

Feb 23-7:34 AM

Practice!

$$\text{current} = \frac{\text{CHARGE}}{\text{TIME}}$$

$$I = \frac{q}{t}$$

If I have 6 C of charge going by in 2 seconds, how much current is that?

$$= \frac{6C}{2s} = 3A$$

If we have 8 A of current for 4 sec, how much charge is that?

How long did it take to have 5 C of charge flow if the current is 10 A?

Feb 18-6:54 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

CP Hmwk: Create your own word problem using the $I = q/t$ formula.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. What is the physics term for "flow of electrons"?

CURRENT

2. What are the **units** for current?

A, AMPS, AMPERES

3. What is one thing in the room that uses current?

JACKS, LIGHTS, PHONES, . . .

Feb 18-6:59 AM